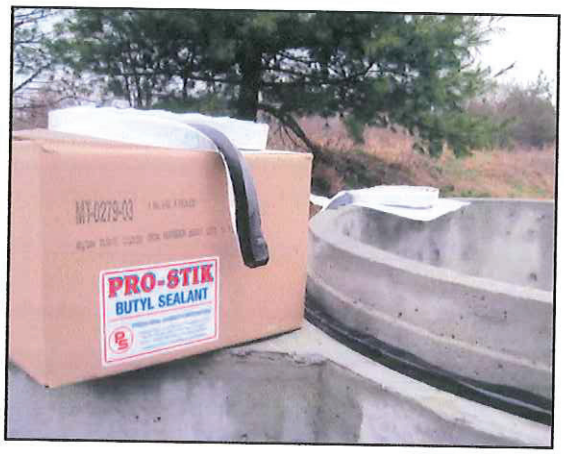
20150069

PRO-STIK

HIGH-PERFORMANCE PREFORMED BUTYL JOINT SEALANT

What It Is

PRO-STIK is a preformed butyl joint sealant that is supplied in rope form. It is carefully blended from uncured butyl rubber and other solids and will not shrink, crack, or dry out. Although clean to handle, it provides excellent adhesion and cohesion to a wide variety of surfaces - concrete, metal, most concrete coatings, glass, wood, and painted surfaces.



Why It's Better

- High quality rubber, 98% solids that will not harden, shrink or oxidize.
- Good adhesion to dry concrete, commonly specified concrete coatings, steel, glass, or painted surfaces.
- Rectangular shapes for optimal adhesion.
- Coated release paper for easy installation.
- Long service life.
- Cohesive properties allow for joint movement.
- Compatible for use with rubber O-Ring designs.
- Low moisture vapor transmission rate (MVTR).
- Special primers available for use on damp, contaminated, or difficult surfaces.

How It Performs

PRO-STIK BUTYL JOINT SEALANT *meets or exceeds all requirements of the following Standards, Specifications and/or Test Methods:*

ASTM C 990 - *Standard Specification for Joints for Concrete Pipe, Manholes, and Precast Box Sections Using Preformed Flexible Joint Sealants; Section 6.2 Butyl Rubber Sealants*

AASHTO M 198 - *Joints for Circular Concrete Sewer and Culvert Pipe Using Flexible Watertight Gaskets*

Typical Applications

- Sanitary Manhole Joints
- Stormwater Manhole Joints
- Irrigation and Drainage Systems
- Box Culverts
- Elliptical/Arch Pipe
- Architectural Foundations
- Underground Utility Vaults
- Stormwater Treatment Structures
- Stormwater Inlet Structures
- On-Site Treatment Tanks
- Grease Interceptors
- Wet Wells

Scan (or click) Here To View More Info On This Product On The Web!

Phone: 800-348-7325
Fax: (260) 436-1908

PRESS-SEAL GASKET CORPORATION
Protecting Our Planet's Clean Water Supply
Press-Seal Gasket is an ISO 9001:2008 Registered & ISO 14001:2004 Compliant Company

Email: sales @press-seal.com
Web: www.press-seal.com

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PRO-STIK

SPECIFICATION and SELECTION GUIDE

Submittal Specification

The joints and/or joint surfaces of the structures shall be sealed with a butyl-rubber-based preformed flexible sealant conforming to ASTM C-990, paragraph 6.2. The material shall be PRO-STIK or EZ-STIK as supplied by PRESS-SEAL GASKET CORPORATION, Fort Wayne, Indiana, or approved equal. The butyl material shall consists of 50% (min.) butyl rubber and shall contain 2% or less volatile matter.

For preformed joint sealants, the sealant shall be sized such that the joint is filled to 50% (min.) of its annular volume when fully assembled, and the sealant shall have the ends kneaded together at the overlap. Primer and/or adhesive as recommended by the sealant supplier shall be employed for adverse, critical, or other applications.

Testing of joints and compliance with construction requirements shall be conducted in strict conformance with the requirements of the sealant supplier.

PRO-STIK AVAILABLE SIZES

Dimensions		Round Equivalent	Roll Length		Rolls per Carton	Cartons per Pallet	Part No.
INCH	mm		FEET	Meter			
.45 X .45	11 x 11 mm	1/2"	21.75 ft	6.95 m	12	24	279.1
.45 X .45	11 x 11 mm	1/2"	26.4 ft	8.44 m	12	24	279.1A
.50 X .75	13 x 19 mm	1/2" X 3/4"	21.75 ft	6.95 m	8	40	288.33
.60 X .80	15 x 20 mm	3/4"	14.5 ft	4.64 m	8	40	279.2B
.75 X 1.05	19 x 27 mm	1"	14.5 ft	4.64 m	6	40	279.3
.88 X 1.40	22 x 36 mm	1-1/4"	14.5 ft	4,64 m	4	40	279.4C

All pallets are shrink-wrapped for outside storage.
Quantity discounts available - contact our Customer Service Department.

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PRO-STIK

PHYSICAL PROPERTIES TEST RESULTS

Description

PRO-STIK is a butyl-rubber-based sealant designed to be permanently flexible, tacky and resistant to moisture and to deterioration by exposure to dilute chemical solutions. PRO-STIK meets all requirements of ASTM C-990; Section 6.2 for Butyl Rubber Sealants and AASHTO M 198.

Typical Properties

The following values represent typical test results and are not manufacturing specifications.

		SPEC.	REQUIRED	PRO-STIK
Butyl Rubber (Hydrocarbon Content %)		ASTM D4	50% min.	51%
Ash Inert Mineral Filler %		AASHTO T111	30% min.	41%
Volatile Matter	(AASHTO T47)	ASTM D6	2% max.	0.3%
Specific Gravity @ 77°F	(AASHTO T229)	ASTM D71	1.15 - 1.50	1.25 - 1.35
Ductility @ 77°F, cm	(AASHTO T51)	ASTM D113	5.0 min.	6.0 cm
Flash Point C.O.C.		ASTM D92	350° min.	375°F
Fire Point C.O.C.		ASTM D92	375° min.	385°F
Rebound Test				
@77°F		ASTM C972	5% - 15%	9.5%
@32°F			30% - 60%	41%
Compression Test				
@77°F, lbf/in³		ASTM C972	100 max.	64 lbf per cubic in.
@32°F, lbf.in³			200 max.	92 lbf per cubic in.
Low Temperature Flexibility				
@-10°F		ASTM C765	180° bend, no cracking, nor loss of adhesion .	Pass - no cracking or adhesion loss.
Elevated Temperature Flexibility				
14 days @ 158°F		ASTM C766	No sag, nor change in extruded shape.	Pass - no sag or shape change.
Adhesion After Impact		ASTM C766-84	No greater loss than 50% of adhesion.	Pass - no loss of adhesion.
Cone Penetration				
@ 77°F, dmm		ASTM D217	50 - 100 dmm	67 dmm
@ 32°F, dmm			40 min.	50 dmm
Chemical Resistance			No deterioration, no cracking, no swelling.	Pass-no visible change after 30 days immersion in 5% solutions of HCl, H_2SO_4,NaOH, KOH,H_2S

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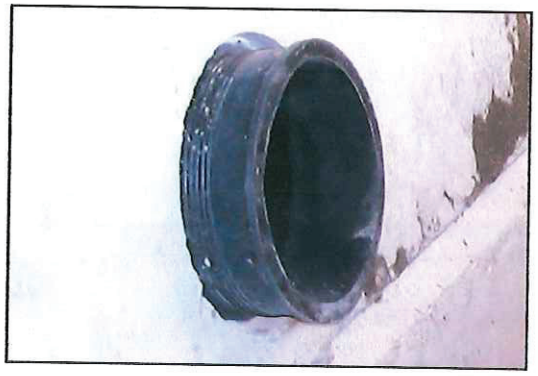
CAST-A-SEAL® 402/402F

CAST-IN BOOT-TYPE CONNECTOR

for 1-1/4" to 6"PVC Pipe (32 mm - 150 mm)

What It Is

CAST-A-SEAL 402/402F is a watertight flexible connector that is cast into the structure when the concrete is poured. The connector is folded into the casting position and placed on the reusable heavy-duty solid plastic mandrel that is installed directly to the form. After the concrete is cured, the form is opened, removing the mandrel from the gasket, but leaving the **CAST-A-SEAL 402/402F** connector embedded in the concrete. The gasket is then simply unfolded at the jobsite and is tightened around the pipe using the supplied stainless steel take-up clamp.



Why It's Better

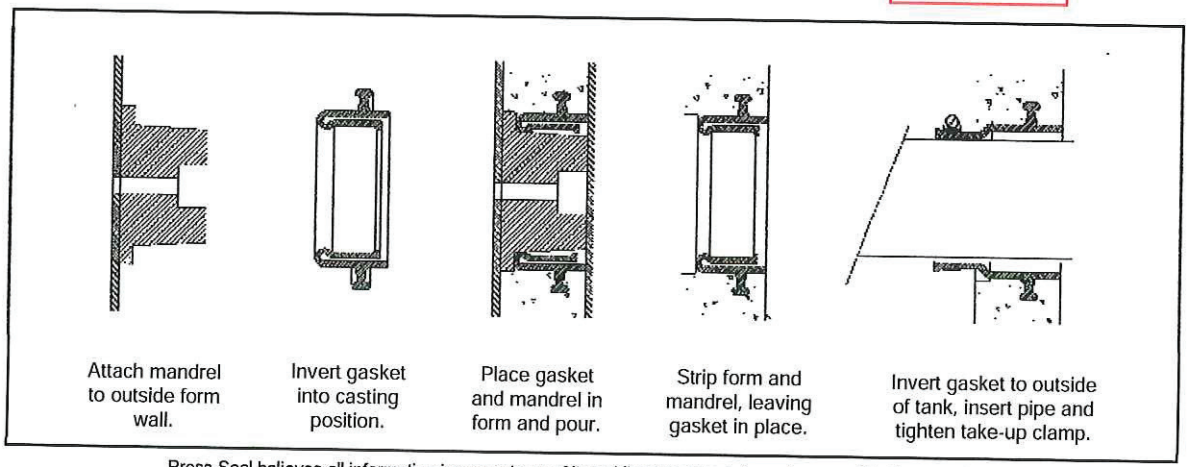
- Simple cast-in design provides flexible watertight connection.
- Eliminates infiltration and exfiltration.
- Improves on-site system performance and minimizes maintenance.
- Protects groundwater from unintended discharges.
- Use in on-site treatment structures, grease interceptors, manholes, wet wells, pump and lift stations, stormwater structures, or any application requiring a flexible watertight connector.

How It Performs

CAST-A-SEAL 402/402F *meets or exceeds all requirements of the following Standards, Codes, Specifications and/or Test Methods:*

ASTM C 1227	***IAPMO Z1000***
ASTM C 1644	***IAPMO Z1001***
ASTM C 923	***NPCA Best Practices***
ASTM C 1244	***NOWRA Model Code***
	ASTM C 1478

Scan (or click) Here To View More Info On This Product On The Web!



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CAST-A-SEAL® 402/402F

PRODUCT SPECIFICATION and SELECTION

Submittal Specification

A flexible pipe-to-structure connector shall be employed in the connection of the sanitary sewer pipe to precast structures. The connector shall be CAST-A-SEAL® 402/402F as manufactured by Press-Seal Gasket Corporation, Fort Wayne, Indiana, or approved equal. The connector shall be the sole element relied on to assure a flexible, watertight seal of the pipe to the precast structure. The connector shall consist of a rubber gasket and an external take-up clamp.

The rubber gasket element shall be constructed solely of synthetic or natural rubber, and shall meet or exceed the physical property requirements of ASTM C 923.

The external take-up clamp shall be constructed of Series 300 non-magnetic stainless steel and shall utilize no welds in its construction. The clamp shall be installed by torquing the adjusting screw using a torque-setting wrench available from the connector manufacturer.

Selection of the proper size connector for the structure and pipe requirement, and installation thereof, shall be in strict conformance with the recommendations of the connector manufacturer. Any dead end pipe stubs installed in connectors shall be restrained from movement per ASTM C 923.

The finished connection shall provide sealing to 13 psi (minimum) and shall accommodate deflection of the pipe to 7 degrees (minimum) without loss of seal.

Vacuum testing shall be conducted in strict conformance with ASTM C 1244 prior to backfill. Other testing shall be conducted in strict conformance with the requirements of the connector manufacturer.

CAST-A-SEAL 402	PIPE SIZE	PIPE O.D. RANGE	WALL THICKNESS*	APPLICATION
452.0250	1.25" - 2" (31 - 51 mm)	1.5" - 2.75" (38 - 70 mm)	2.5" - 6" (64 - 150 mm)	STANDARD
452.0450	4" (100 mm)	4.2" - 4.7" (107 - 119 mm)	2.5" - 6" (64 - 150 mm)	STANDARD
452.0402F1	4" (100 mm)	4.2" - 4.7" (107 - 119 mm)	2.5" - 4.0" (64 - 102 mm)	Closed Face
452.0650	6" (150 mm)	6.2" - 6.7" (157 - 170 mm)	2.5" - 6" (64 - 150 mm)	STANDARD
CAS ADAPTER	3" (75 mm)	3.2" - 3.6" (81 - 91 mm)	---	Use with 4" CAST-A-SEAL

PRODUCT PERFORMANCE

CAST-A-SEAL402/402F meets and/or exceeds all requirements of ASTM C 923, including physical properties of materials and performance testing, including:

- 13 psi minimum in straight alignment
- 10 psi at minimum 7°angle
- 10 psi minimum under shear load of 150 lbs/in. pipe diameter

CAST-A-SEAL 402/402F meets and/or exceeds the requirements of the following Standards, Specifications, Codes, and Test Methods:

- ASTM C 923 *Standard Specification for Resilient Connectors Between Reinforced Concrete Manhole Structures, Pipes, and Laterals*
- ASTM C 1644 *Standard Specification for Resilient Connectors Between Reinforced Concrete On-SIte Wastewater Tanks and Pipes*
- ASTM C 1478 *Standard Specification for Storm Drain Resilient Connectors Between Reinforced Concrete Storm Sewer Structures, Pipes and Laterals*
- ASTM C 1244 *Standard Test Method for Concrete Sewer Manholes by the Negative Air Pressure (Vacuum) Test*
- IAPMO/ANSI Z1000 *Standard for Prefabricated Septic Tanks*
- IAPMO/ANSI Z1001 *Standard for Prefabricated Gravity Grease Interceptors*
- *NPCA Best Practices Manual for Precast Concrete On-Site Wastewater Tanks*
- *NOWRA Model Code Framework*

TYPICAL TEST RESULTS for CAST-A-SEAL 402/402F (as in ASTM C 1644, C 923, and C 1478)			
Test	ASTM Test Method	Test Requirements	Typical Result
CHEMICAL RESISTANCE; 1N SULFURIC ACID and 1N HYDROCHLORIC ACID	D 534, AT 22°C FOR 48 HRS	NO WEIGHT LOSS NO WEIGHT LOSS	NO WEIGHT LOSS NO WEIGHT LOSS
TENSILE STRENGTH	D 412	1200 PSI, MIN.	2100 PSI
ELONGATION AT BREAK	D 412	350%, MIN.	525%
HARDNESS	D 2240 (SHORE A DUROMETER)	±5 FROM THE MANUFACTURER'S SPECIFIED HARDNESS	<2
ACCELERATED OVEN-AGING	D 573, 70± 1°C FOR 7 DAYS	DECREASE OF 15%, MAX. OF ORIGINAL TENSILE STRENGTH, DECREASE OF 20%, MAX. OF ELONGATION	-13% TENSILE CHANGE, -14% ELONGATION CHANGE
COMPRESSION TEST	D 395, METHOD B, AT 70°C FOR 22 HRS	DECREASE OF 25%, MAX. OF ORIGINAL DEFLECTION	13%
WATER ABSORPTION	D 471 IMMERSE 0.75 BY 2-IN.SPECIMEN IN DISTILLED WATER AT 70°C FOR 48 hrs	INCREASE OF 10%, MAX. OR ORIGINAL BY WEIGHT	3.50%
OZONE RESISTANCE	D 1171	RATING 0	PASS
LOW-TEMP, BRITTLE POINT	D 746	NO FRACTURE AT -40°C	PASS
TEAR RESISTANCE	D 624, METHOD B	200 LBF/IN. (MIN.)	450 LBF/IN.

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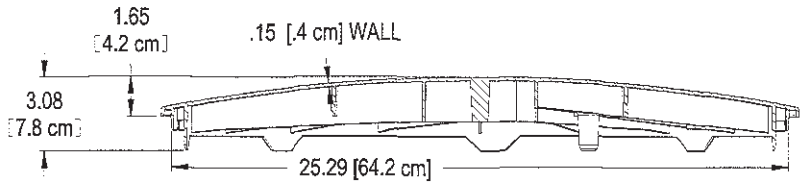
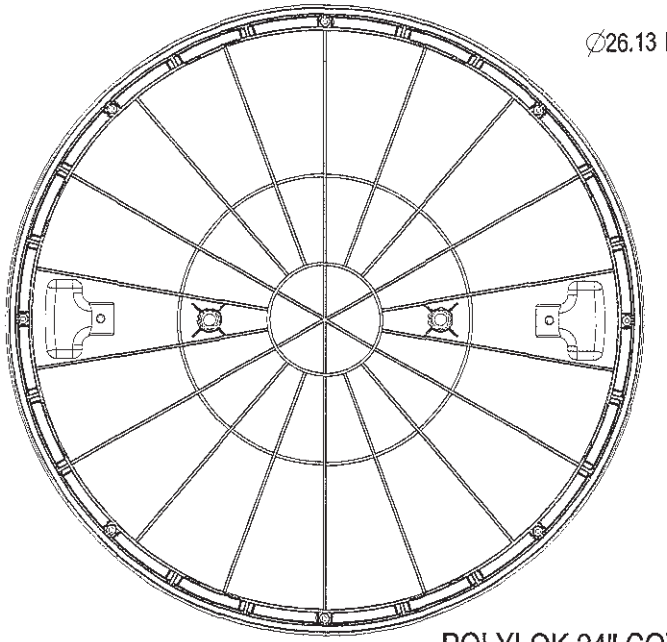
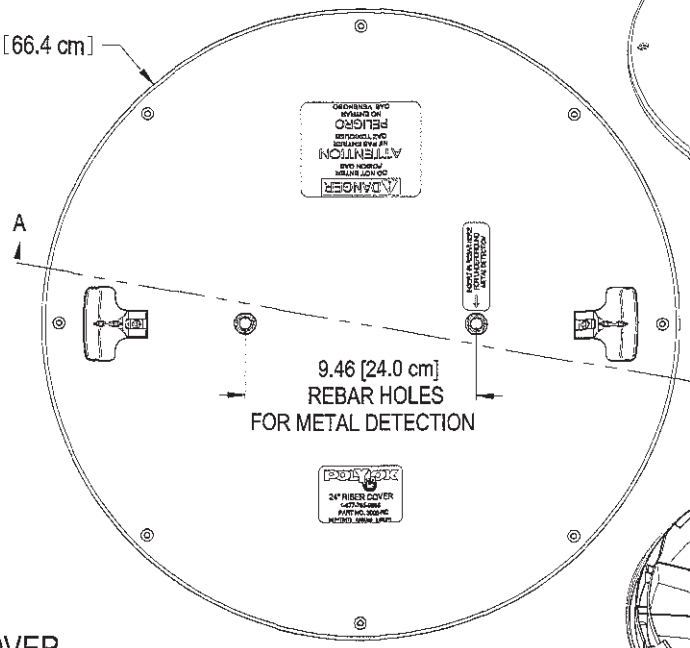
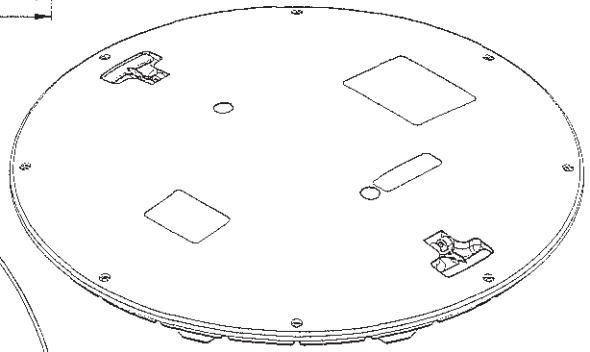
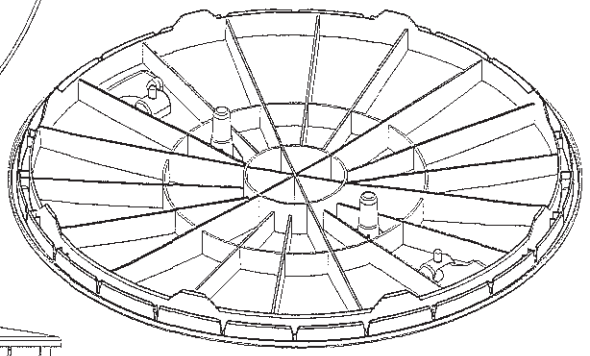


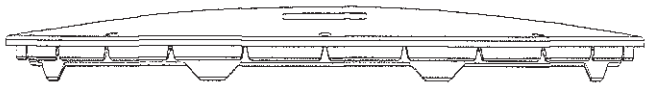
SECTION A-A





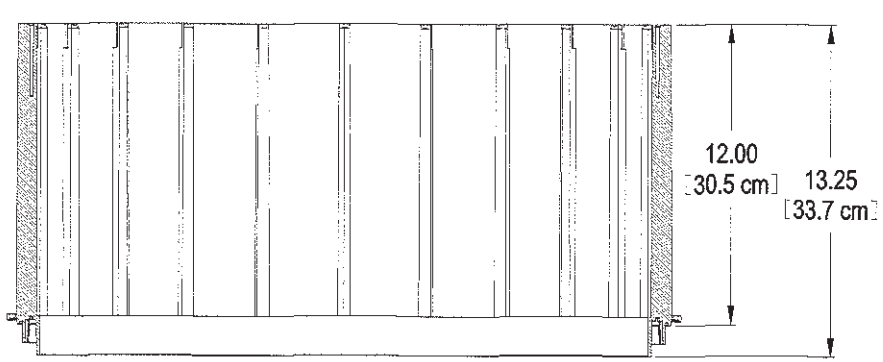




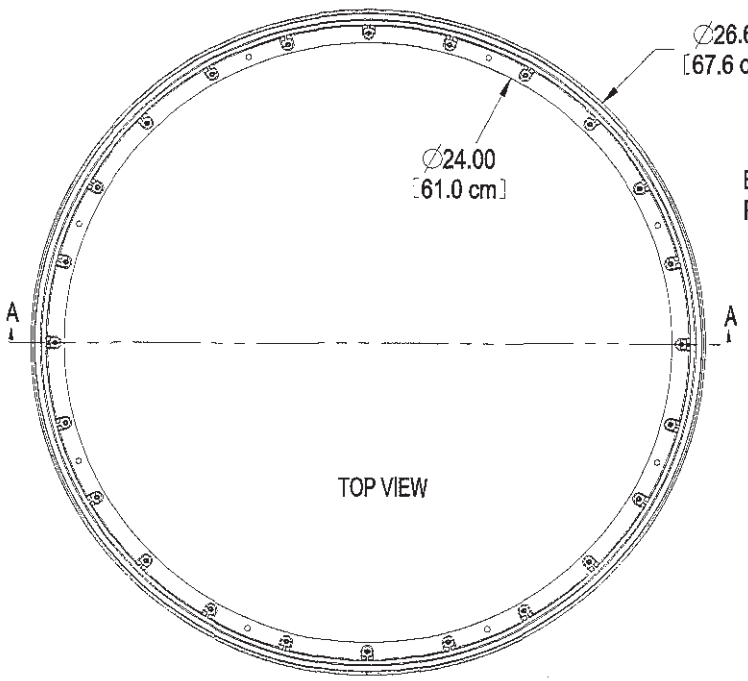


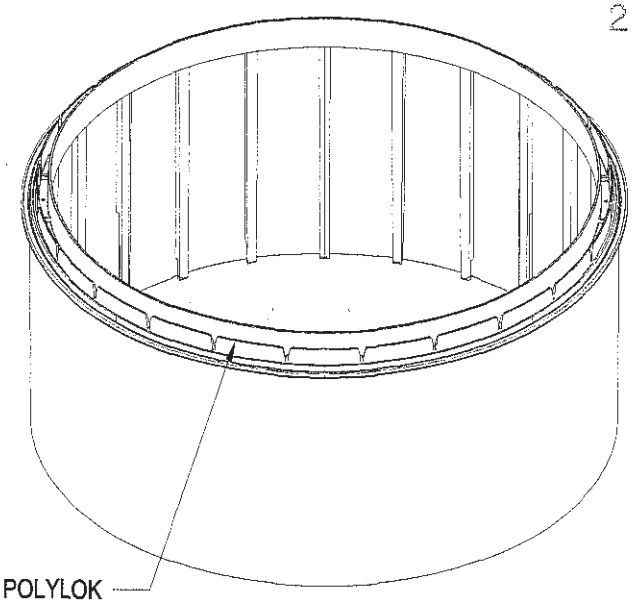
POLYLOK 24" COVER
PART NO. 3008-RC
MATERIAL - HDPE
COLOR - GREEN
3/22/13

20150069



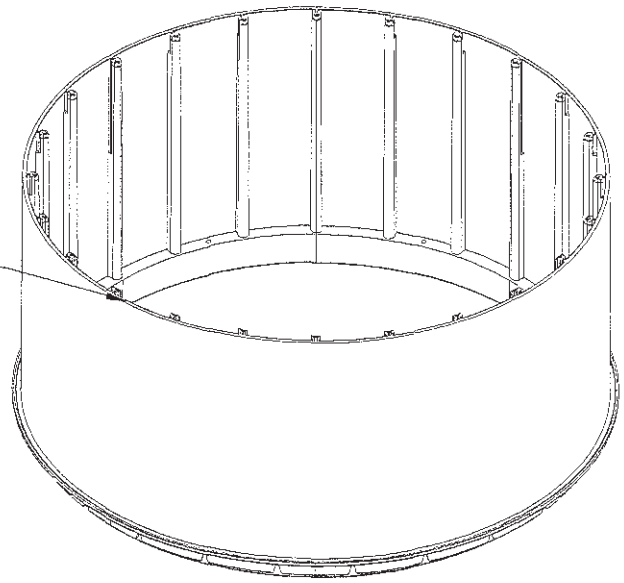
SECTION A-A

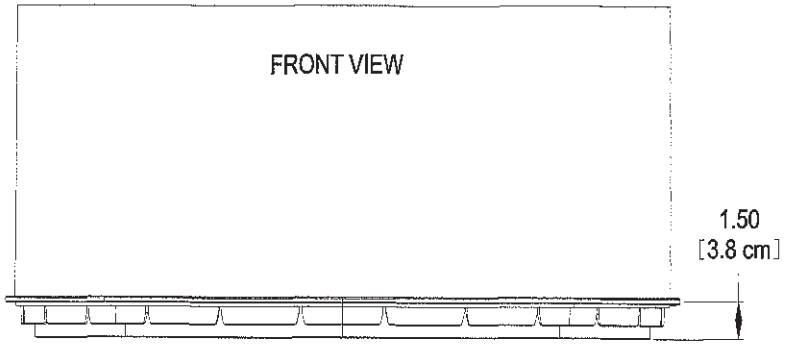




BOTTOM DETAIL FITS POLYLOK
PART NO. - 3008
3008-R12
3008-R12B
3009-AR
3009-RTR24
3008-RP

TOP DETAIL FITS POLYLOK
PART NO.- 3008
3008- RC
3008-R12
3008-G24
3008-HD
3008-RP

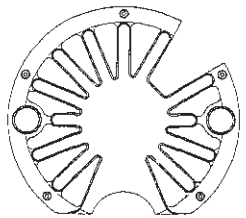




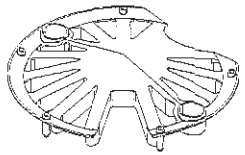
POLYLOK 12 X 24 RISER
PART NO. 3008-R12
MATERIAL - HPDE
COLOR - GREEN

20150069

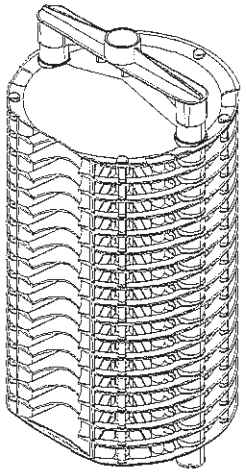
BEST TECHNOLOGY
10" FILTER CASE AND CARTRIDGE
PART NO'S. GF10-8
GF10-16
GF10-32

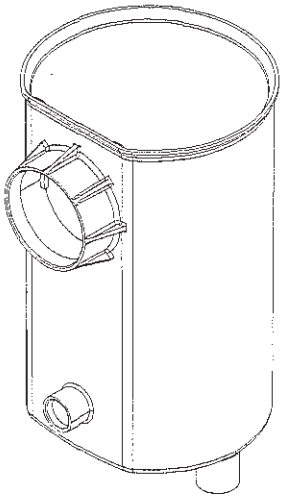


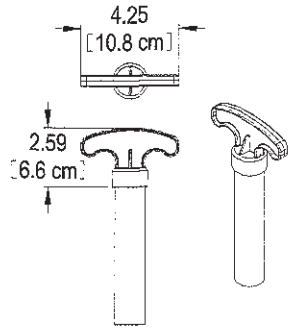
FILTER PLATE
5.8 FT. (1.77 METERS)
OF FILTRATION
PER FILTER PLATE



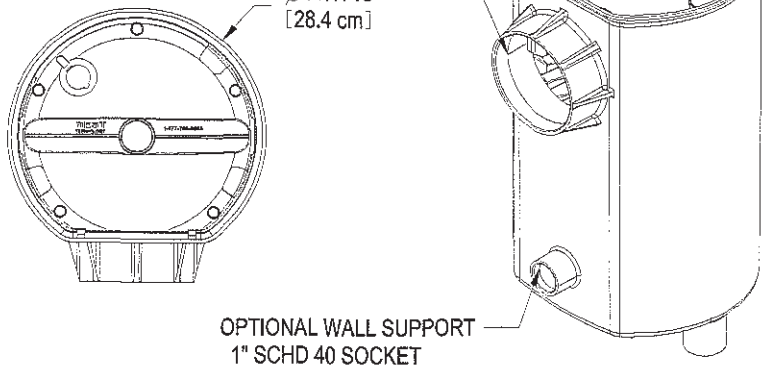
SOCKET IN HANDLE ACCEPTS
1" SCHD. 40 PIPE.

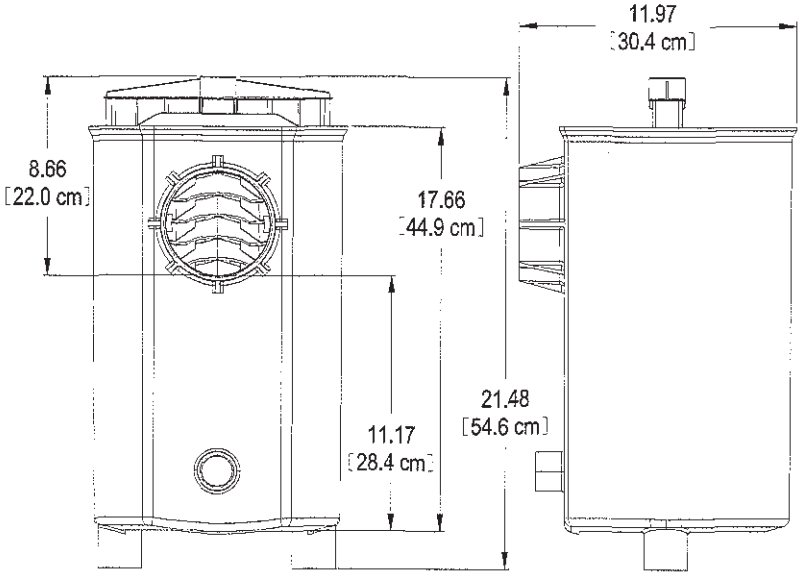


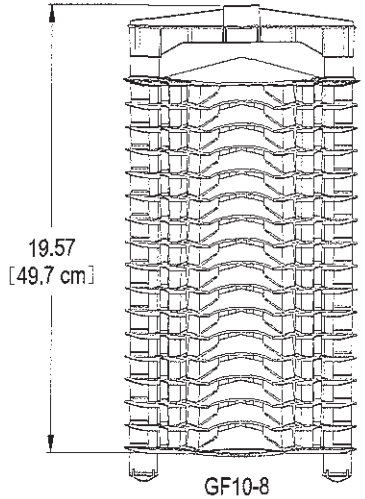




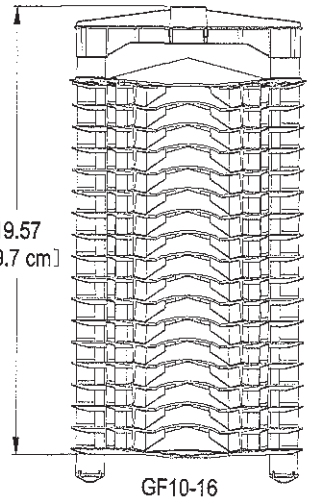
OPTIONAL HANDLE EXTENSION
AVAILABLE FOR 1" SCHD 40 PIPE
PART NO. - 3014-H FILTER HANDLE



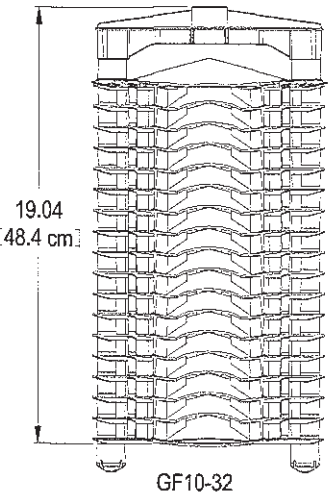




GF10-8
16 FILTER PLATES
92.93 FT (28.33 METERS)
OF 1/8" (.32 CM) FILTRATION



GF10-16
17 FILTER PLATES
98.74 FT (30.10 METERS)
OF 1/16" (.158 CM) FILTRATION



GF10-32
17 FILTER PLATES
98.74 FT (30.10 METERS)
OF 1/32" (.08 CM) FILTRATION

BASF
The Chemical Company

Technical Data Guide

7 | 07 14 00
Fluid-Applied Waterproofing

MasterSeal® HLM 5000

Liquid, cold-applied elastomeric waterproofing membrane system

FORMERLY SONOSHIELD® HLM 5000

YIELD

25–30 ft²/gal at 55–65 wet mils (0.61–0.74 m²/L at 1.4–1.7 mm wet thickness)

25–30 ft²/gal at 45–55 dry mils (0.61–0.74 m²/L at 1.1–1.4 mm dry thickness)

Coverage may vary with the application technique used. Actual coverage rate and mil thickness depend on finish and porosity of the substrate.

STORAGE

Store in unopened containers in clean, dry conditions at 40 to 80°F (4 to 27°C). During storage, an easily removed skin of HLM 5000 may form, which does not affect performance of the product.

SHELF LIFE

– 1 Year Pails
– 6 Months Drums

VOC CONTENT

– MasterSeal HLM 5000 SL: 183 g/L
– MasterSeal HLM 5000 S: 190 g/L
– MasterSeal HLM 5000 R: 180 g/L
– MasterSeal HLM 5000 T: 132 g/L

DESCRIPTION

MasterSeal HLM 5000 is a one-component, moisture-curing, bitumen-modified polyurethane elastomeric waterproofing membrane for exterior below-grade or between-slab applications. It is available in four grades:

MasterSeal HLM 5000 SL (self-leveling/squeegee)
MasterSeal HLM 5000 T (trowel)
MasterSeal HLM 5000 S (spray)
MasterSeal HLM 5000 R (roller)

PRODUCT HIGHLIGHTS

- Available in standard and high-build systems
- Waterproofing membrane to prevent water penetration
- Elastomeric accommodates expansion and contraction
- Wide service-temperature range, making MasterSeal HLM 5000 suitable for all climates
- Chemical resistance to bacterial attack, select acids, alkalis and salts
- Seamless cold-applied membrane eliminates lapping, seaming and precutting
- Does not require hot-melt equipment

APPLICATIONS

- Concrete
- Plywood (exterior)
- Exterior below grade (on masonry, concrete, and incidental metal)
- Above grade (between two-course concrete and within cavity walls)
- Parking garages and concrete tanks
- Plaza decks and malls
- Fountains and pools
- Balconies and planters
- Below-grade slabs
- Walls and culverts
- Sea walls, dams and reservoirs

PACKAGING

- MasterSeal HLM 5000 SL, HLM 5000 S, and HLM 5000 R: 5 gal (18.95 L) pails, 55 gal (208 L) drums; available special order
- MasterSeal HLM 5000 T: 5 gal (18.95 L) pails
- MasterSeal 995: 300 ft by 37½" (91 by 0.9 m) rolls, yielding 937 ft² (87 m²)
- MasterSeal 977:
  - 50 mil by 40" by 48" (1.3 mm by 1 m by 1.2 m) sheets, 500 per pallet, yielding 13⅓ ft² (1.2 m²) per sheet or 6,665 ft² (619 m²) per pallet.
  - 120 mil (⅛") by 40" by 48" (3 mm by 1 m by 1.2 m) sheets, 500 per pallet, yielding 13⅓ ft² (1.2 m²) per sheet or 6,665 ft² (619 m²) per pallet.

HOW TO APPLY MASTERSEAL HLM 5000

SURFACE PREPARATION

1. For best results, all concrete deck surfaces should be lightly steel troweled to a flat, uniform surface. A light broom finish is acceptable. New concrete must be properly water cured at least 14 days. Membrane curing compounds must be mechanically removed.

Technical Data

Composition

MasterSeal HLM 5000 is a bitumen-modified polyurethane.

Compliances

- ASTM C 836
- National standard of Canada 37.58 - M86 developed by CGSB

Typical Properties

HLM 5000

PROPERTY	VALUE
Minimum recovery, %	90
Swelling in water, 3 days at room temperature	Nil
Service temp. range, °F (°C)	
Minimum	-40 (-40)
Maximum	120 (49)

MASTERSEAL 995

PROPERTY	VALUE
Width, in	
Minimum	37½
Maximum	38½
Length, ft	300
Thickness, in	(FTM-5136) 0.024 (-0.0, + 0.002)
Nominal weight, oz/yd²	2.13
Construction, in²	34 by 30
Yarn denier	70

Test Data

HLM 5000 (self-leveling grade)

PROPERTY	RESULTS		TEST METHOD
	High-Build System	**Standard System**	
Hardness, Shore 00	N/A	85	ASTM C 836
Viscosity, poise			Brookfield
HLM 5000 SL	125		
HLM 5000 S	450		
HLM 5000 R	800		
HLM 5000 T	4,000		
Tensile strength, psi (MPA)	200 (1.4)	150 (1.0)	ASTM D 412
Average elongation, %	300[1]	600	ASTM D 412
100% modulus, psi (Mpa)	80 (0.6)	80 (0.6)	ASTM D 412
Moisture-vapor permeability, dry perms	0.075	0.1	ASTM E 96
Crack bridging test, cycled 10 times per 24 hours at 15°F (-9°C)	Passed ¼"; no loss of bond or or cracking exhibited	Passed 1/16"; no loss of bond or cracking exhibited	ASTM C 836
Extensibility after heat aging		No cracking	ASTM C 836
Adhesion in peel, lbs/in (1 lb/in minimum)	5		ASTM C 836
Weight loss, % (20% max)		16	ASTM C 836

Results shown are typical but are not intended as performance criteria for on-site installed material.
[1]Tested in direction of greatest elongation of fabric

MasterSeal 995

PROPERTY	RESULTS	TEST METHOD
Elongation, %		ASTM 5034
Machine direction	54	
Cross direction	147	
Grab breaking, lbs		ASTM 5034
Machine direction	54	
Cross direction	32	
Mullen burst, psi	70	

MasterSeal 977

PROPERTY	RESULTS	TEST METHOD
Weight, lbs/ft²		
50 mil	0.188	
120 mil	0.428	
Burst strength, psi (MPa)	175	ASTM D 2529
Puncture resistance, in-lbs	45	ASTM D 781

Test results are averages obtained under laboratory conditions. Reasonable variations can be expected.

2. For extremely porous block: Prime with a coat of MasterSeal HLM 5000 diluted up to 25% with MasterSeal 990 or xylene. Or apply a parge coat of MasterSeal 581 at the rate of approximately 400 ft² (37.2 m²) per bag and allow to cure a minimum of 7 days before applying MasterSeal HLM 5000.
3. Remove dust, dirt and other contaminants just before or during application. Surfaces must be dry at the time of application.
4. Air-void pockmarks or honeycombs must be opened up to allow MasterSeal HLM 5000 to fill the cavities completely. Air entrapment within voids may cause blisters. Extreme cases may require additional repair.

PRESTRIPING

1. Before applying the final membrane, all joints, cracks and openings around protrusions must be sealed by caulking or prestriping (a preliminary coating of MasterSeal HLM 5000 applied with a trowel or stiff-bristled brush). Allow to dry overnight before applying final membrane.
2. When the final membrane is applied, the overall thickness over joints and cracks, at coves and around penetrations should be approximately 100 wet mils (2.5 mm) on the standard system.

STATIC JOINTS AND CRACKS

Joints and cracks less than 1/16" (1.6 mm) should be filled by prestriping. Apply material so it both fills and overlaps the joint or crack to a width of 4" (102 mm) on each side.

WORKING OR EXPANSION JOINTS

All joints over 1/8" (3 mm) must be sealed with a Master Builders Solutions urethane sealant. Any working joint less than 1/8" (3 mm) should be routed to a minimum of 1/4" (6 mm) and filled with a sealant. Prevent the waterproofing membrane from adhering to the joint sealant, which could cause sealant or membrane failure, by applying a coat of wax or bond breaker tape over the cured sealant and then prestriping.

UNCOATED METAL SURFACES

Remove dust, debris, and any other contaminants from vent, drain pipe and post penetrations, reglets and other metal surfaces. Clean surfaces to near white per SSPC-NACE2 and prime immediately with MasterSeal P 173. Provide appropriate cant with MasterSeal NP 1™ or NP 2™ sealants to eliminate 90° angles.

VENT, DRAIN PIPE, AND POST PENETRATIONS

Clean metal surfaces to bright metal and prime with a quality rust-inhibiting metal primer followed by MasterSeal P 173 or P 176. Remove dust, debris and any other contaminants from voids. Seal with the appropriate sealant.

APPLICATION

A test application is always recommended before proceeding with entire application.
NOTE: Finish coat must be applied in a pinhole-free, continuous membrane for waterproofing integrity.

STANDARD SYSTEM

1. Select the grade of MasterSeal HLM 5000 that best meets individual job requirements. Use MasterSeal HLM 5000 T for trowel application, MasterSeal HLM 5000 S for spray application, MasterSeal HLM 5000 R for roller application or MasterSeal HLM 5000 SL for squeegee application.
2. For horizontal applications, empty contents of pail and spread immediately to ensure workability. Best results are obtained by marking off 125 ft² (11.61 m²) areas and evenly spreading the contents of a 5 gallon (18.93 L) unit with a rubber-edged notched squeegee. Repeat the above procedure until the entire surface is covered.
3. For vertical applications, apply by trowel, roller or spray at the rate of 25 ft²/gallon (0.6 m²/L). Best results are obtained by marking off 125 ft² (11.6 m²/L) and evenly applying the contents of a 5 gallon (18.93 L) pail.
4. Verify the applied thickness with a wet mil gauge as the work progresses.
5. The integrity of the cured membrane on a horizontal surface may be verified by damming the entire area and flooding with water to a minimum depth of 2" (51 mm) and allowing the water to stand for 24–48 hours. Visually inspect the bottom surface to check for any water penetration. If repairs are necessary, the area should be drained and allowed to dry before reapplying MasterSeal HLM 5000. After reapplication, the area should be tested again for membrane integrity.

HIGH-BUILD SYSTEM

Concrete application: Apply 60 wet mils of MasterSeal HLM 5000, followed by setting MasterSeal 995 reinforcing fabric into the wet material. Overlap all seams a minimum of 3" (76 mm). Additional material may be required to properly embed the reinforcing fabric where it overlaps. Allow the first coat to cure overnight and follow with a second 60 wet-mil application of MasterSeal HLM 5000.

Plywood application: All plywood construction must comply with APA (American Plywood Association) standards. Caulk all joints with a Master Builders Solutions sealant and then proceed with the MasterSeal HLM 5000 high-build system.

SPRAY EQUIPMENT

For spray equipment recommendations, consult the equipment manufacturer.

CURING

Appreciable properties develop within 24–48 hours at 75°F (24°C) and 50% relative humidity. Protect MasterSeal HLM 5000 from traffic during curing.

DRAINAGE AND PROTECTION

1. For protection during backfill and where hydrostatic pressure is anticipated, use the appropriate MasterSeal 975 Drain Board System for installation instructions.
2. For protection during backfill only, install protection board as soon as possible following cure of MasterSeal HLM 5000.

CLEAN UP

Clean all tools and equipment immediately after application with MasterSeal 990.

HOW TO APPLY MASTERSEAL 977
SURFACE PREPARATION

1. Waterproofing membranes must be protected against tear, puncture, and other abuses during placement of concrete wearing slabs and reinforcing steel. They should also be protected from jobsite traffic and backfilling operations.
2. All specifications calling for membrane waterproofing should also require protection of membrane as an integral part of the overall waterproofing system.

APPLICATION

Install overlapping MasterSeal 977 protection board as soon as possible following cure of the liquid membrane. Protect MasterSeal HLM 5000 from traffic before placement of protection board. MasterSeal HLM 5000 must be cured before installation of any topping.

FOR BEST PERFORMANCE

MASTERSEAL HLM 5000

- Apply MasterSeal HLM 5000 when substrates are dry and air temperatures are 40 to 90°F (4 to 32°C); for application at temperatures below 40°F (4°C), consult Technical Services.
- Temperatures influence viscosity and handling characteristics of MasterSeal HLM 5000: heat increases and cold decreases the flow. Keep MasterSeal HLM 5000 cool in hot weather and warm in cold weather.
- Avoid application when inclement weather is present or imminent.
- Do not apply to reinforcing bars or to wet or contaminated surfaces.
- Do not directly heat containers with flame, stove, hot plate or oven.
- Patch all voids and deep depressions in substrates with appropriate patching material before applying MasterSeal HLM 5000.
- Use MasterSeal 550 under thin-set tile applications.
- Before applying MasterSeal HLM 5000, dam all drains and drain openings.
- Carefully work material over irregular concrete to avoid pinholes and holidays.
- Protect MasterSeal HLM 5000 coated surfaces from puncture with protection board until required topping or backfill is placed.
- Not intended as an exposed or wearing surface.
- Do not use where a solvent odor is objectionable, e.g., near areas where food preparation or processing occur during the application.
- Specify wet or paper curing for concrete to be coated with MasterSeal HLM 5000; avoid using liquid curing compounds.
- In horizontal applications concrete must be slopped to drain to avoid ponding water on the surface of MasterSeal HLM 5000
- When using drainage mat directly over MasterSeal HLM 5000, a layer of 6 mil polyethylene sheeting should be used between the MasterSeal HLM 5000 and the drainage mat.

MASTERSEAL 977

- Store MasterSeal 977 on a flat surface and keep it dry; do not remove shrink wrap until immediately before use.
- If board is exposed to prolonged periods of water immersion or excessive humidity, it may curl or wrinkle.
- MasterSeal 977 to be covered with a concrete wearing course must be securely attached to membrane.

GENERAL

- Proper application is the responsibility of the user. Field visits by BASF personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the jobsite.

HEALTH, SAFETY AND ENVIRONMENTAL

Read, understand and follow all Safety Data Sheets and product label information for this product prior to use. The SDS can be obtained by visiting www.master-builders-solutions.basf.us, e-mailing your request to basfbscst@basf.com or calling 1(800)433-9517. Use only as directed. **For medical emergencies only, call ChemTrec® 1(800)424-9300.**

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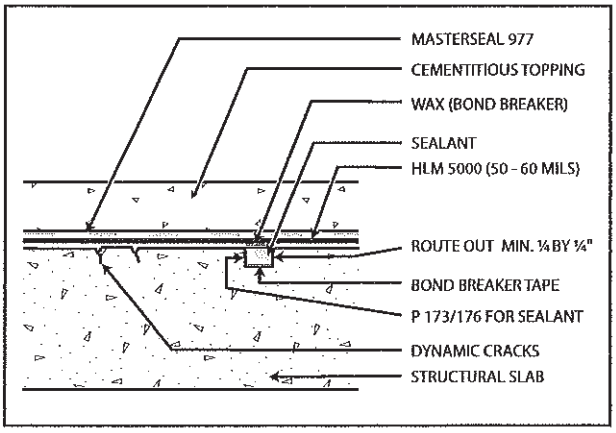
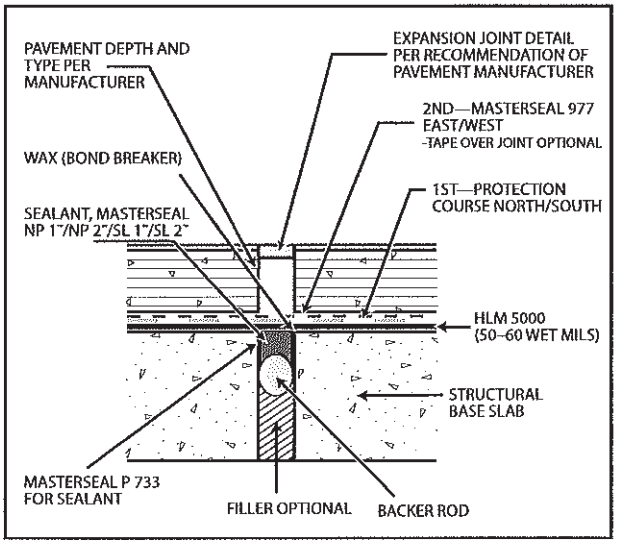
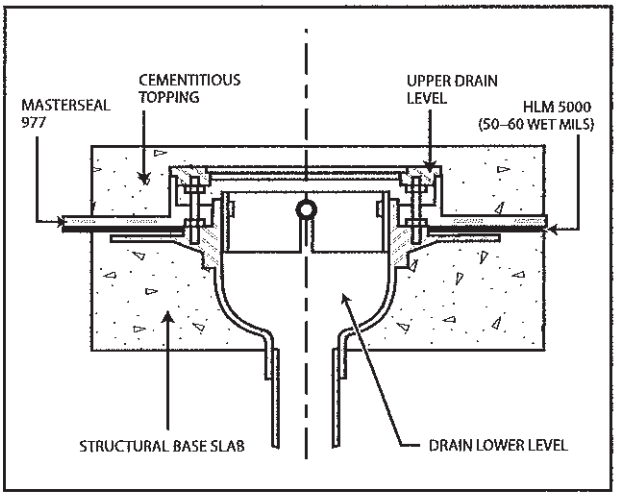


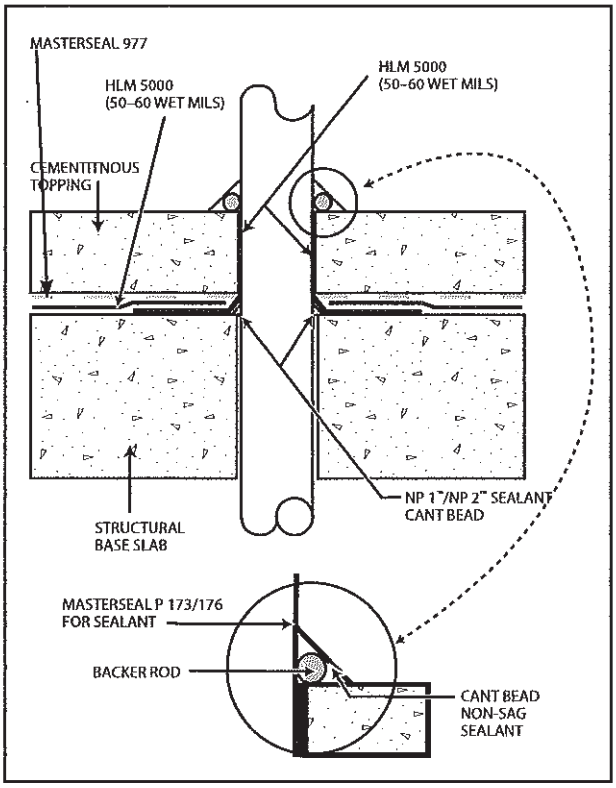
Dynamic Crack Detail



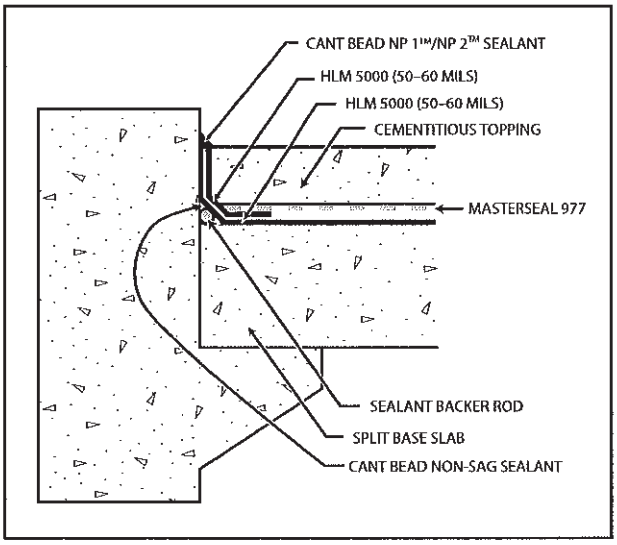
Asphalt Pavement Topping/Expansion Joint



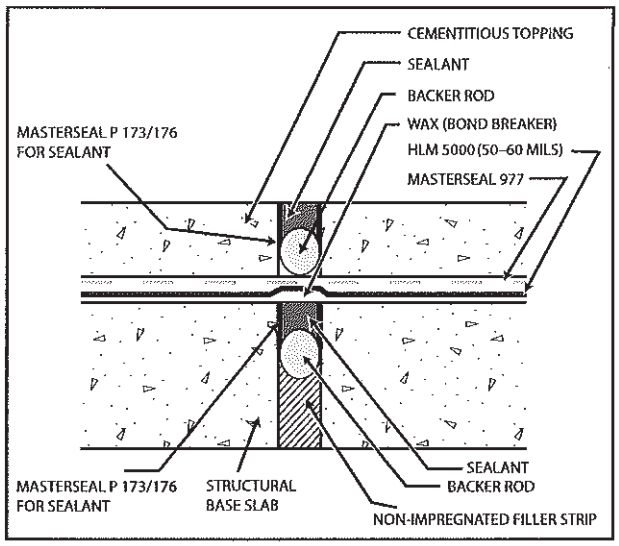
Waterproofing at Bi-Level Drain



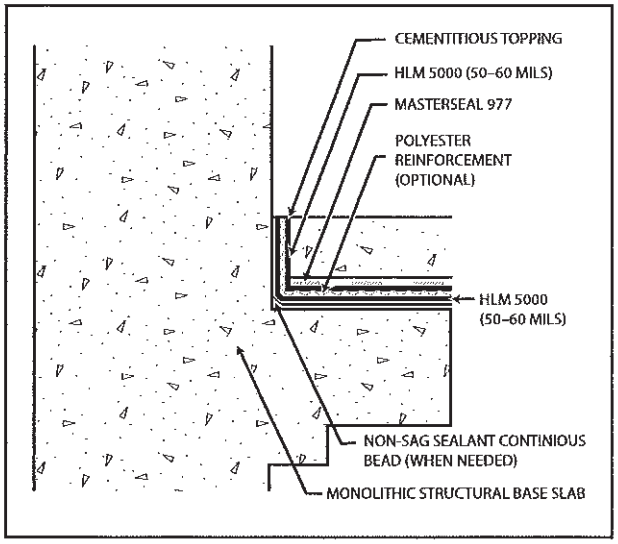
Vent/Drain/Pipe/Post Penetration Detail



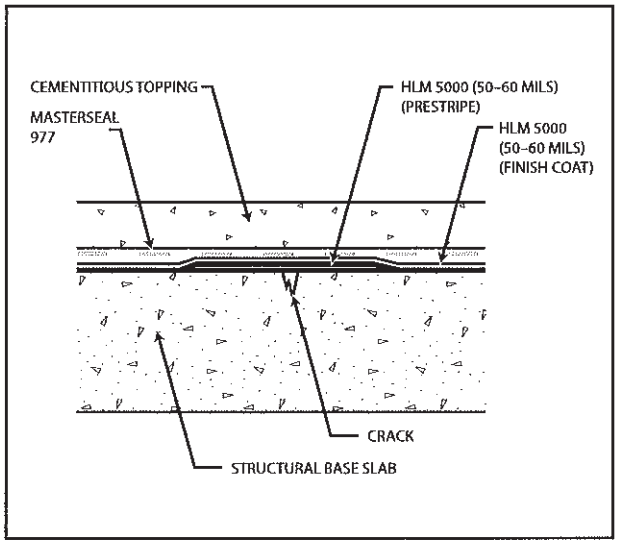
Split Slab with Cant Detail



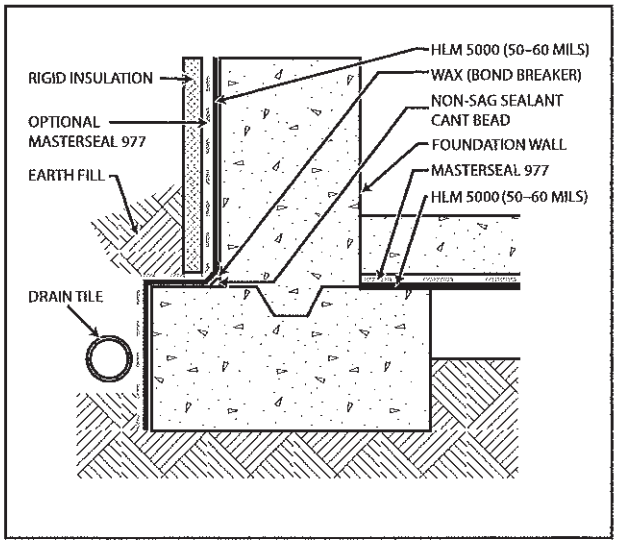
Expansion Joint Detail



Inside Corner Detail (Static)



Static Crack/Prestripe Detail



Waterproofing Foundation Walls

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